

# Hitachi S-4700-II SEM

## Instrument capabilities:

1. Instrument specifications:
  - a) Accelerating voltages: 0.5–30 kV
  - b) Cold FEG emitter
  - c) SEI resolution: 1.5 nm at 15 kV; 2.5 nm at 1.0 kV
2. Specimen stage:
  - a) 5-axis motorized stage
  - b) Maximum sample size: 27 mm (H) x 150 mm (dia.)
3. Operating modes: SEI, BEI, light element XEDS (mapping & spectrum imaging).

## Typical experiments (examples):

- High resolution secondary electron imaging
- XEDS mapping and spectrum imaging
- Low-kV studies of ceramic surfaces
- Backscattered electron compositional imaging

